



Self-Regulatory Organizations; Investors Exchange LLC; Order Granting Approval of a  
Proposed Rule Change to Modify IEX Rule 11.190(b)(7) to Adopt an Optional Cancel or Re-  
Price Functionality for D-Limit Orders

January 9, 2023

I. Introduction

On November 4, 2022, the Investors Exchange LLC (“IEX” or the “Exchange”) filed with the Securities and Exchange Commission (“Commission”), pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (“Exchange Act”)<sup>1</sup> and Rule 19b-4 thereunder,<sup>2</sup> a proposed rule change to allow Users<sup>3</sup> of Discretionary Limit orders (“D-Limit orders”) to opt for their D-Limit orders to either automatically cancel or re-price – under certain conditions – after an initial price adjustment. The proposed rule change was published for comment in the Federal Register on November 25, 2022.<sup>4</sup> The Commission received no comments on the proposed rule change. This order approves the proposed rule change.

II. Description of the Proposed Rule Change

The Exchange seeks to amend IEX Rule 11.190(b)(7) to allow a User to attach an optional instruction to a D-Limit order so that the order will either re-price or cancel following an initial price adjustment during a period of quote instability<sup>5</sup> under certain circumstances. Specifically, the D-Limit order would either reprice or cancel if, after the most recent quote

---

<sup>1</sup> 15 U.S.C. 78s(b)(1).

<sup>2</sup> 17 CFR 240.19b-4.

<sup>3</sup> See IEX Rule 1.160(qq) (defining “User”). Users include both Members and Sponsored Participants. See IEX Rule 1.160(ll) (defining “Sponsored Participant”).

<sup>4</sup> See Securities Exchange Act Release No. 96352 (November 18, 2022), 87 FR 72523 (“Notice”).

<sup>5</sup> See infra notes 10-14 and accompanying text.

instability determination<sup>6</sup> that resulted in the D-Limit order being price adjusted, ten (10) milliseconds have passed and the order is resting at a price that is less aggressive than the NBB<sup>7</sup> for buy orders or less aggressive than the NBO<sup>8</sup> for sell orders.

#### Current D-Limit Functionality

D-Limit orders are limit orders that may be either displayed or non-displayed and are initially priced and ranked in the Exchange's Order Book at the order's limit price.<sup>9</sup>

When a D-Limit order is resting on the Exchange's Order Book, it will reprice automatically when the Exchange's Crumbling Quote Indicator ("CQI") is triggered (i.e., during a period of relative quote instability).<sup>10</sup> The CQI that applies to D-Limit orders is governed by IEX Rule 11.190(g)(1), under which the Exchange utilizes quoting activity of eight away exchanges' Protected Quotations<sup>11</sup> and a mathematical calculation to assess the probability of an imminent change to the current Protected NBB<sup>12</sup> to a lower price or imminent change to the current Protected NBO<sup>13</sup> to a higher price for a particular security. When the quoting activity meets predetermined criteria, the System treats the quote as not stable ("quote instability" or a "crumbling quote") and the CQI is then "on" at that price level for two milliseconds. During all other times, the quote is considered stable and the CQI is "off". The System independently assesses the stability of the Protected NBB and Protected NBO for each security.<sup>14</sup>

---

<sup>6</sup> Id.

<sup>7</sup> See IEX Rule 1.160(u).

<sup>8</sup> See IEX Rule 1.160(u).

<sup>9</sup> See IEX Rule 1.160(p).

<sup>10</sup> See IEX Rule 11.190(g) (describing crumbling quotes and quote instability).

<sup>11</sup> See IEX Rule 1.160(bb) (defining "Protected Quotation" as an automated quotation that is calculated by IEX to be the best bid or best offer of an exchange).

<sup>12</sup> See IEX Rule 1.160(cc).

<sup>13</sup> See id.

<sup>14</sup> After this proposal was filed and published for comment, the Commission approved IEX Rule 11.190(g)(2), which provides a new alternative calculation for determining when there is quote instability and therefore, when the CQI is triggered. See Securities

After the CQI is triggered, all D-Limit orders – both resting and those being entered at the time of quote instability – are adjusted to a less-aggressive price and will subsequently rest on the Exchange’s Order Book at that new price. Specifically, if the System receives a D-Limit buy (sell) order during a period of quote instability, and the D-Limit order has a limit price equal to or higher (lower) than the quote instability determination price level (“CQI Price”), the price of the order will be automatically adjusted by the System to one (1) minimum price variation (“MPV”)<sup>15</sup> lower (higher) than the CQI Price.<sup>16</sup> Similarly, when unexecuted shares of a D-Limit buy (sell) order are posted to the Order Book, if the CQI turns on and such shares are ranked (and displayed in the case of a displayed order) by the System at a price equal to or higher (lower) than the CQI Price, the price of the order will be automatically adjusted to a price one MPV lower (higher) than the quote instability price level.<sup>17</sup>

A D-Limit order that has been subject to an automatic price adjustment will not revert to the price at which it was previously ranked (and, if applicable, displayed). Further, whenever the price of a D-Limit order is adjusted, the order will receive a new time priority, and the User that entered the order will receive an order restatement message from the Exchange.<sup>18</sup>

### Proposal

The Exchange proposes to provide Users with an option to either reprice or cancel a price-adjusted D-Limit order under certain circumstances by attaching an instruction to their D-

---

Exchange Act Release No. 96416 (December 1, 2022), 87 FR 75099 (December 7, 2022). However, the alternative calculation under Rule 11.190(g)(2) may not be applied to D-Limit orders, so D-Limit orders only price adjust when there is quote instability pursuant to IEX Rule 11.190(g)(1). Thus, these recent changes to Rule 11.190(g) do not affect the present proposal.

<sup>15</sup> See IEX Rule 11.210.

<sup>16</sup> See IEX Rule 11.190(b)(7)(A) and (B).

<sup>17</sup> See IEX Rule 11.190(b)(7)(C) and (D).

<sup>18</sup> If multiple D-Limit orders are adjusted at the same time, their relative time priority is maintained.

Limit orders pursuant to new IEX Rule 11.190(b)(7)(E).<sup>19</sup> If a D-Limit order that is entered with this optional instruction is then subject to an automatic price adjustment pursuant to IEX Rule 11.190(b)(7) and is resting at a price that is less aggressive than the NBBO ten (10) milliseconds after the most recent quote instability determination that resulted in the order being price adjusted, the order will either be canceled (if the User selected the cancel instruction) or re-priced to the less aggressive of the order's limit price or the NBB (for a buy order) or NBO (for a sell order) (if the User selected the re-price instruction).<sup>20</sup>

### III. Discussion and Commission Findings

After careful review, the Commission finds that the Exchange's proposal is consistent with the requirements of the Exchange Act and the rules and regulations thereunder applicable to a national securities exchange.<sup>21</sup> In particular, the Commission finds that the proposed rule change is consistent with Sections 6(b)(5)<sup>22</sup> and 6(b)(8)<sup>23</sup> of the Exchange Act. Section 6(b)(5) of the Exchange Act requires that the rules of a national securities exchange be designed, among other things, to promote just and equitable principles of trade, to remove impediments to and perfect the mechanism of a free and open market and a national market system and, in general, to

---

<sup>19</sup> The Exchange also proposes to reorganize IEX Rule 11.190(b) so that the text in current IEX Rule 11.190(b)(7)(E) will become Rule 11.190(7)(F). Additionally, the Exchange proposes to add a reference to new IEX Rule 11.190(b)(7)(E) into paragraph (F).

<sup>20</sup> Additionally, displayed D-Limit orders that re-price to the NBB (for a buy order) or the NBO (for a sell order) will be subject to IEX's Display-Price Sliding rule (IEX Rule 11.190(b)(h)(1)) and will be displayed at the "most aggressive permissible price" without locking or crossing a Protected Quotation (IEX Rule 1.160(bb) of an away market, which means they will be priced one MPV less aggressive than the locking (IEX Rule 11.190(b)(h)(3)(A)(ii)) or crossing (IEX Rule 11.190(b)(h)(3)(B)(ii)) price. Non-displayed D-Limit orders that re-price to the NBB (for a buy order) or the NBO (or a sell order) will be subject to IEX's Non-Displayed Price Sliding rule, which means they will be able to post at the locking or crossing price. See IEX Rule 11.190(b)(h)(2). In the Notice, the Exchange provides examples to demonstrate how the new cancel or re-price instruction would operate. See Notice, supra note 4, at 72525.

<sup>21</sup> In approving this proposed rule change, the Commission has considered the proposed rule's impact on efficiency, competition, and capital formation. See 15 U.S.C. 78c(f).

<sup>22</sup> 15 U.S.C. 78f(b)(5).

<sup>23</sup> 15 U.S.C. 78f(b)(8).

protect investors and the public interest, and not be designed to permit unfair discrimination between customers, issuers, brokers, or dealers. Section 6(b)(8) of the Exchange Act requires that the rules of a national securities exchange not impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Exchange Act.

In its proposal, IEX represents that some Users of D-Limit orders have informed IEX that they “cannot readily configure their trading systems to receive, process, and respond to the restatement messages IEX transmits to [Users] after each price adjustment.”<sup>24</sup> IEX states that these Users “are unable to track whether their D-Limit orders have been re-priced, and if so, the price at which they are currently resting.”<sup>25</sup> As such, “[w]ithout this information, IEX understands that such [Users] are hindered in their ability to timely cancel or adjust the prices of their resting D-Limit orders to meet their trading objectives.”<sup>26</sup> IEX says that to address this issue, some Users have requested that IEX provide optional order type functionality to allow a D-Limit order that has been subject to an automatic price adjustment to be automatically either canceled or re-priced.<sup>27</sup>

IEX asserts that the proposed 10 millisecond delay after which a re-priced D-Limit order could either cancel or re-price to a more aggressive price, as described above, will not provide any speed advantages to Users that elect to use the order type’s new optional cancel or re-price functionality when compared to Users who cancel or re-price a price-adjusted D-Limit themselves.<sup>28</sup> Specifically, IEX notes that all orders are subject to the Exchange’s existing latency for all orders, which are 37 and 350 microseconds for outbound and inbound messages,

---

<sup>24</sup> Notice, supra note 4, at 72524. IEX also states that these Users note that their trading systems are not currently configured to ingest the D-Limit restatement messages (and, in some cases, other restatement messages), and they would have to devote significant resources to build the logic in order to ingest, and respond to, the messages for this one order type. See id.

<sup>25</sup> Id.

<sup>26</sup> Id.

<sup>27</sup> See id.

<sup>28</sup> See Notice, supra note 4, at 72524.

respectively.<sup>29</sup> The Exchange explains that this aggregate 387 microseconds of latency for a “round trip” that would be required for a User to respond to a D-Limit price adjustment is more than 9 milliseconds less than the proposed 10 millisecond time after which the proposed order type’s new instruction will result in the System canceling or re-pricing a D-Limit order that was automatically adjusted.<sup>30</sup> IEX represents that this “timing differential is designed to ensure that orders canceled or re-priced by IEX have no advantage over orders canceled or repriced by a User that processed the restatement message” because “the Exchange would cancel or re-price orders more slowly than orders canceled or re-priced by a User.”<sup>31</sup>

The Commission previously found that the D-Limit order type is a “narrowly tailored tool that balances the ability of long-term investors to access displayed liquidity in the ordinary course against the current structural advantages enjoyed by short-term latency arbitrage trading strategies that rely on superior access to the fastest data and connectivity, while also encouraging liquidity providers to post more displayed liquidity.”<sup>32</sup> The key feature of the D-Limit order type is that, when IEX’s CQI is triggered, the order (if its limit price is equal to or higher (for a buy order; or lower for a sell order) than the CQI Price) will automatically adjust to a price one MPV lower (higher) than the CQI Price and the price will not revert to the prior, more aggressive price.

IEX now seeks to offer Users the ability to attach an optional instruction on a D-Limit order to either cancel or reprice the order if, after 10 milliseconds since the D-Limit was price adjusted, the D-Limit order is resting at a price that is less aggressive than the NBB for buy orders or less aggressive than the NBO for sell orders. Accordingly, the optional cancellation or re-pricing feature would occur after a D-Limit order is initially adjusted to a less aggressive

---

<sup>29</sup> See id.

<sup>30</sup> See id.

<sup>31</sup> Id.

<sup>32</sup> Securities Exchange Act Release No. 89686 (August 26, 2020), 85 FR 54438, 54443 (September 1, 2020) (SR–IEX–2019–15) (“D-Limit Approval Order”).

price. It neither affects when nor how a D-Limit order is initially price adjusted during a period of quote instability, and therefore, the Commission believes that this proposal does not alter the core attributes of the D-Limit order type.

The Commission further believes that the triggering of the proposed cancellation or re-pricing functionality is appropriately delayed to an extent that would not be expected to confer a special advantage to the User over other Users that elect to retain for themselves the responsibility for canceling or updating their resting D-Limit orders. To the extent some Users do not presently have the ability or capacity to build the IEX-specific capability to track and respond when their D-Limit orders have been price adjusted during periods of quote instability, the proposal would allow those Users to utilize D-Limit orders and manage those orders like Users that do have such ability. As the Exchange notes in its filing, the 10 millisecond delay is significantly longer than the aggregate sub-millisecond “round trip” latency that a User would encounter when manually re-pricing or canceling a price-adjusted D-Limit order. The Commission accordingly finds that the proposal does not permit unfair discrimination between customers, issuers, brokers, or dealers in offering the option for Users to instruct IEX to cancel or reprice its D-Limit order as described above after 10 milliseconds have passed and the order remains priced less aggressive than the national best quote. Given the 10 millisecond delay, that functionality should not provide a special advantage to Users when compared to Users that have the technology and ability to track and directly respond to D-Limit price adjustments more quickly by themselves.

Finally, the Commission finds that the proposal promotes just and equitable principles of trade, removes impediments to and perfects the mechanism of a free and open market and a national market system and, in general, protects investors and the public interest in that it is designed to cancel an adjusted D-Limit order only after 10 milliseconds have passed and only where the order remains priced less aggressive than the national best quote where it is less likely to receive an execution. Alternatively, if the User selects the re-price option, the D-Limit order

will only re-price to a price more aggressive than that at which it was resting and will not reprice to a less aggressive price. As such, the new D-Limit functionality will re-price the D-Limit order to join the NBB (for a buy order) or NBO (for a sell order), if allowable given the order's limit price. In doing so, the proposal will increase the liquidity available on IEX to all investors at the national best quote.

For the reasons discussed above, the Commission finds that the proposal is narrowly tailored to not impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Exchange Act, and is reasonably designed to among other things, remove impediments to and perfect the mechanism of a free and open market and a national market system and, in general, protect investors and the public interest. Accordingly, the Commission finds the proposed rule change to be consistent with the Exchange Act, including the requirements of Section 6(b)(5) and Section 6(b)(8) of the Exchange Act.

#### IV. Conclusion

IT IS THEREFORE ORDERED, pursuant to Section 19(b)(2) of the Exchange Act,<sup>33</sup> that the proposed rule change (SR-IEX-2022-10), be, and it hereby is, approved.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.<sup>34</sup>

Sherry R. Haywood,

Assistant Secretary.

[FR Doc. 2023-00555 Filed: 1/12/2023 8:45 am; Publication Date: 1/13/2023]

---

<sup>33</sup> 15 U.S.C. 78s(b)(2).

<sup>34</sup> 17 CFR 200.30-3(a)(12).